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RE: Consultation: Risk Management Scope for Per- and Polyfluoroalkyl Substances (PFAS)

On behalf of Ontario's more than 3,000 environment and cleantech firms, the Ontario Environment Industry Association (ONEIA) is writing to provide our response to the Consultation: *Risk Management Scope for Per- and polyfluoroalkyl substances (PFAS)*.

Ontario is home to Canada's largest group of environment and cleantech companies. The most recent statistics from the federal government show that Ontario's environment sector employs more than 226,000 people across a range of sub-sectors. This includes firms working in such diverse areas as materials collection and transfer, resource recovery, composting and recycling solutions, alternative energy systems, environmental consulting, brownfield remediation, and water treatment – to name just a few. These companies contribute more than \$25 billion to the provincial economy, with approximately \$5.8 billion of this amount coming from export earnings.

ONEIA members are committed to engaging with governments as they develop policies and regulations that are consistent with our principles of sound science, a sound environment, and a sound economy.

ONEIA would like to thank the Government of Canada for the opportunity to review and provide comments on Risk Management Scope and on the Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report. PFAS is an area of great interest to our member companies, and we are eager to collaborate with the government on a practical approach to mitigate environmental and human health impacts of PFAS. ONEIA's PFAS Committee has solicited comments from interested members and is happy to provide the feedback included below. (Please note that our comments on the Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report are outlined in a separate submission.)

Table 1. ONEIA Comments on the Risk Management Scope for Per- and Polyfluoroalkyl Substances (PFAS)

No.	Comment
1	<p>In relation to the decision-making feedback request on "availability of alternatives to PFAS, in products including, but not limited to, firefighting foams", please note that ONEIA includes members that are specifically focused on developing PFAS-free fire suppression concentrate alternatives, such as FireRein, a cleantech company in Napanee, Ontario. FireRein is currently servicing local, regional and international markets with their Eco-Gel™ product, which contains no PFAS or environmentally toxic surfactant mixtures, and has been UL certified to work on class A and class B fires. Eco-Gel directly addresses the risk management options for PFAS from firefighting foams in Section 3.3 of the Risk Management Scope document.</p>
2	<p>In 2020, an ONEIA member company, WSP (then Wood), conducted a study for the European Commission and the European Chemicals Agency (ECHA) to assess the use of PFAS in fire-fighting foams in the EU, including the feasibility of alternatives and socio-economic impacts of a potential restriction. In terms of alternatives, it was concluded that fluorine-free alternatives to PFAS-based fire-fighting foams <i>“are generally available and technically feasible and have been successfully implemented by many users in most of the main user sectors identified. Use areas where PFAS-free alternatives have not been fully tested, are in the downstream petrochemical sector (refineries and steam crackers) and large storage tank facilities. In particular, combatting fires involving large storage tanks requires foams capable of flowing on large burning liquid surfaces and sealing against hot metal surfaces to prevent reignition. More testing is required to prove performance of alternatives under some conditions. To date, no real-world examples of a successful transition in installations with large tanks have been identified.”</i> At this time, it is understood that some progress in testing fluorine-free foams on large storage tanks has been made, but the main conclusions above still hold true. As part of the evaluation, the federal government should assess all PFAS uses to make sure PFAS use for key applications where substitutions are not available are not unintentionally affected, and to avoid supply chain disruptions. Also, assessment of the enforceability of the potential ban should be conducted and inform the policy considering the number of products and substances that may be affected.</p>
3	<p>The socio-economic impacts of a potential ban on PFAS in firefighting foam will depend upon the inclusion of applications where the feasibility of alternatives is still uncertain, and on whether existing stockpiles can continue to be used or need to be disposed of. Given this, the primary potential impacts identified include:</p> <ul style="list-style-type: none"> • Costs of disposal and replacement of existing stocks of fire-fighting foams (if required by the risk management approach); • Costs of cleaning and/or replacing existing equipment that used PFAS to allow use of alternative fire-fighting foams; • Costs of purchasing potentially higher volumes of alternative fire-fighting foams that may be required to achieve comparable performance outcomes; • Reduction of PFAS contamination and associated clean-up/remediation costs

	<ul style="list-style-type: none"> • Potential reduction of costs for treatment of firewater run-off and disposal of expired foams; and • Increased health and environmental benefits could also be expected in association with reduced PFAS contamination.
4	<p>An ONEIA member company, WSP (previously Wood), has estimated that the costs (net of quantifiable economic benefits/savings) of transitioning to PFAS-free firefighting foam would be in the order of EUR 100-200 million (CA \$145-290 million) in the EU. The assessment of transition costs in key user sectors in Canada is currently underway, but, to date, this data is not available.</p>
5	<p>Beyond PFAS in firefighting foam, the socio-economic implications of a potential ban of PFAS from other industrial uses or production processes (e.g., textiles, construction, oil & gas, mining, etc.) are challenging to quantify, given the huge number and diversity of uses of PFAS; however, the EU REACH restriction proposal does provide some insight:</p> <ul style="list-style-type: none"> • The most significant implications are expected to be associated with end uses/products where PFAS are applied, which would vary by application, but could be expected to include reformulation and other substitution costs, as well as potential changes in the performance of final products. These changes could also result in follow-on impacts such as higher costs to users (e.g., due to lower durability or weaker performance of products), as well as potential implications in the competitiveness and employment of the affected industries. • The magnitude of the implications will be highly dependent upon the feasibility of alternatives in each specific application. For most applications, available alternatives have been identified and impacts would be expected to be low; however, for several applications, there are significant concerns about the feasibility of alternatives, and time would be required to allow the industry to further develop alternatives to avoid severe socio-economic implications (e.g., certain types of professional apparel [PPE] and high performance membranes, certain specialized refrigerants, industrial food and feed production applications, certain applications of F-gases, certain medical applications, hydraulic fluids, certain mobile air conditioning applications, semiconductors, certain components of fuel cells, and fluoropolymers in petroleum production and mining). For some applications, the feasibility of alternatives, and therefore the likely impacts, are still highly uncertain and further information gathering would be advisable (e.g., certain medical applications and medical textiles, fluoroelastomers in electronics, certain components of fuel cells, lithium-ion and flow batteries, and some other applications in the energy sector, bridge bearings, and lubricants). <p>Further details can be found in the EU REACH restriction proposal, which appears to be the most comprehensive assessment of PFAS uses, alternatives and socio-economic impacts for a broad range of uses so far. An additional useful source of information is ChemSec's PFAS guide and report on PFAS in electronics.</p>

6	Section 2.2 indicates that if the Ministers finalize the recommendation to add the class of PFAS to Schedule 1, a risk management instrument will be proposed within 24 months and finalized within 18 months from the date on which the risk management instrument is proposed. This suggests the Federal government intends to require up to an additional 3.5 years to implement an instrument directed at regulating PFAS as a class. Is that correct? If so, the government needs to identify if / what interim measures may be proposed to address the PFAS issue.
7	Section 3.3 indicates there is consideration in aligning the risk management options with actions in other jurisdictions, “where appropriate”. The document references a suite of international and provincial guidelines or requirements. Does the government have specific priority jurisdictions in mind with which it may look to align actions?
8	The last paragraph of Section 7.1.2 notes the status of provincial regulation across Canada; however, it does not speak to the current presence of regulated PFAS criteria in Alberta.
9	Section 7.2 speaks to a number of international agreements under which Canada operates but does not reference the Basel Convention which Canada is party to.
10	Section 8.1 notes that there will be additional opportunity for consultation as the Government of Canada advances potential proposed risk management instruments. ONEIA would like to remain engaged and included in these consultation efforts.

ONEIA appreciates the opportunity to provide our comments and suggestions on Risk Management Scope and on the Draft State of Per- and Polyfluoroalkyl Substances (PFAS) Report.

We want to reiterate that we are eager to work with the Environment and Climate Change Canada, Health Canada and other agencies of the Federal government to advance a practical approach to mitigating the environmental and human health impacts of PFAS. We look forward to being engaged in future discussions and consultations, and we would welcome the opportunity to discuss our position and recommendations further.

Please contact our office at info@oneia.ca or at (416) 531-7884 should you have any questions.

Sincerely,



Krista Barfoot
Chair, PFAS Committee
ONEIA



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